

Appl. No. 10/748,734
Amdt. Dated July 28, 2006
Reply to Office Action Dated March 7, 2006

Attorney Docket No. 88519.0001
Customer No. 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently amended) ~~The transparent electrode of Claim 3,~~

A transparent electrode comprising:

a ZnO layer; and

an Mg-doped ZnO film formed on the ZnO layer,

wherein the ZnO layer is formed on a semiconductor layer, and

wherein the semiconductor layer comprises a GaN system semiconductor layer.

5. (Currently amended) A transparent electrode comprising:

a ZnO layer; and

an Mg-doped ZnO film formed on the ZnO layer,

wherein the ZnO layer is formed on a semiconductor layer, and

~~The transparent electrode of Claim 3, wherein the semiconductor layer~~ comprises an n-type GaN system semiconductor layer formed on a substrate, an emission layer formed on the n-type GaN system semiconductor layer, and a p-type GaN system semiconductor layer formed on the emission layer.

6. (Currently amended) ~~The transparent electrode of Claim 3~~ Claim 4, wherein the Mg-doped ZnO film overlies an upper surface of the ZnO layer.

7. (Canceled)

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8. (Currently amended) The transparent electrode of Claim 2 Claim 4,
wherein a first metal pattern is formed on the Mg-doped ZnO film.

9. (Currently amended) The transparent electrode of Claim 3 Claim 4,
wherein a second metal pattern is formed on the semiconductor layer.

10. (Currently amended) The transparent electrode of Claim 2 Claim 4,
wherein the Mg-doped ZnO film improves acid resistance of the transparent
electrode.

11. (Currently amended) The transparent electrode of Claim 3 Claim 4,
wherein the semiconductor layer is formed on a substrate.

12. (Cancelled)

13. (Currently amended) A light emitting device comprising:
a semiconductor layer formed on a substrate;
a ZnO transparent electrode formed on the semiconductor layer; and
an Mg-doped ZnO film formed on the ZnO transparent electrode.

~~The light emitting device of Claim 12~~, wherein the semiconductor layer
comprises a GaN system semiconductor layer.

14. (Currently amended) A light emitting device comprising:
a semiconductor layer formed on a substrate;
a ZnO transparent electrode formed on the semiconductor layer; and
an Mg-doped ZnO film formed on the ZnO transparent electrode.

~~The light emitting device of Claim 12~~, wherein the semiconductor layer
comprises an n-type GaN system semiconductor layer formed on the substrate, an
emission layer formed on the n-type GaN system semiconductor layer, and a p-type
GaN system semiconductor layer formed on the emission layer.

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15. (Currently amended) The light emitting device of Claim 12 Claim 13, wherein the Mg-doped ZnO film overlies an upper surface of the ZnO transparent electrode formed on the semiconductor layer.

16. (Canceled)

17. (Currently amended) The light emitting device of Claim 12 Claim 13, wherein a first metal pattern is formed on the Mg-doped ZnO film.

18. (Currently amended) The light emitting device of Claim 12 Claim 13, wherein a second metal pattern is formed on the semiconductor layer.

19. (Currently amended) The light emitting device of Claim 12 Claim 13, wherein the Mg-doped ZnO film improves acid resistance of the light emitting device.

20-25. (Canceled)